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AUTHOR Bailey, Phillip D.; Onwuegbuzie, Anthony J.
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ABSTRACT

This study determined which study habits would distinguish successful from unsuccessful foreign language learners. Participants were 219 college students from a variety of disciplinary backgrounds enrolled in either Spanish, French, German, or Japanese classes. The students completed the Study Habits Inventory and the Background Demographic Form. A canonical discriminant analysis revealed that, compared to their high-performing counterparts, students with the lowest levels of foreign language performance tended to report the following: (1) they frequently included a lot of irrelevant or unimportant information in their notes; (2) when they had difficulty with their assignments, they did not seek help from their instructor; (3) they put their lecture notes away after taking the test and never consulted them again; (4) they had to be in the mood before attempting to study; (5) they had a tendency to doodle or daydream when they were trying to study; and (6) they did not look up in a dictionary the meaning of words that they did not understand. (Contains 41 references.) (SM)

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Unsuccessful Study Habits in Foréign Language Courses

Phillip D. Bailey

University of Central Arkansas

Anthony J. Onwuegbuzie

Howard University

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Correspondence should be addressed to Phillip D. Bailey, Department of World Languages, Literatures, and Cultures. University of Central Arkansas, 207 Irby Hall, 201 Donaghey Avenue, Conway, Arkansas 72035-0001. Phone (501) 450-5645. Fax (501) 450-5185. E-mail: PHILLIPB@mail.UCA.EDU

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Abstract

The purpose of this study was to determine which study habits distinguish successful from unsuccessful foreign language learners. Participants were 219 college students from a variety of disciplinary backgrounds, enrolled in either Spanish, French, German, or Japanese classes. A canonical discriminant analysis (F[6, 117], $p < .0001$; canonical $R = .92$) revealed that, compared to their high-performing counterparts, students with the lowest levels of foreign language performance tended to report that (a) they frequently include a lot of irrelevant or unimportant information in their notes; (b) when they have difficulty with their assignments, they do not seek help from their instructor; (c) they put their lecture notes away after taking the test and never consult them again; (d) they have to be in the mood before attempting to study; (e) they have a tendency to doodle or to daydream when they are trying to study; and (f) they do not look up in a dictionary the meanings of words that they do not understand. Implications are discussed.

Unsuccessful Study Habits in Foreign Language Courses

Although some students excel in learning a foreign language, many students fail to achieve their desired levels of proficiency. In an attempt to understand this phenomenon, researchers have investigated several factors that may affect language learning. To date, a variable that has been found to be among the best predictors of foreign language achievement among college students is overall academic achievement. For example, Onwuegbuzie, Bailey, and Daley (2000), who examined an array of cognitive, affective, personality, and demographic variables using multiple regression techniques, found that overall academic achievement, as measured by students' grade point average (gpa), was the best predictor of foreign language achievement, explaining 11.5% of the variance. Specifically, the relationship between gpa and foreign language performance was positive. The fact that students who tend to be the most academically successful in college also tend to be those with the highest levels of achievement in foreign language courses suggests that some of the attributes and characteristics possessed by high achievers in many courses also may be exhibited by students with the greatest propensity for foreign language learning.

The use of effective study habits also has been found consistently to be related to academic performance. For example, Jones, Slate, and Kyle (1992) found that college students with high levels of overall academic achievement tend to have more effective study habits than do low-achieving students with respect to study techniques, time management, and attitudes towards learning. Moreover, a positive relationship between study skills and academic performance has been reported consistently in the literature (e.g., Al-Hilawani & Sartawi, 1997; Blustein et al., 1986; Jones & Slate, 1992).

In fact, based on a series of studies conducted by Jones and Slate (1992), Jones, Slate, Perez, and Marini (1993) estimated that study skills explain approximately 15% of the variance in undergraduate students' grades. Further, a causal link between study habits and academic performance has been suggested via the finding that training in study skills significantly increased the retention rate of at-risk college students (Polansky, Horan, & Hanish, 1993).

The relationship between study habits and academic achievement has been found at the high school (Jones, Slate, Bell, & Saddler, 1991; Jones, Slate, Blake, & Holifield, 1992; Slate, Jones, & Dawson, 1993), undergraduate (Agnew, Slate, Jones, & Agnew, 1993; Jones, Slate, & Kyle, 1992; Jones, Slate, Mahan, Green, Marini, & DeWater, 1994; Jones, Slate, Marini, & DeWater, 1993; Lammers, Onwuegbuzie, & Slate, in press; Lawler-Prince, Slate, & Jones, 1993; Slate, Jones, & Charlesworth, 1990), and graduate (Onwuegbuzie, Slate, & Schartz, 2001) levels. At the high school level, only between 40% and 48% of appropriate study behaviors have been found to be performed by high school students (Jones, Slate, Blake, & Sloas, 1995; Jones et al., 1991; Jones, Slate, Blake, et al., 1992; Slate et al., 1993; Stanley, Slate, & Jones, 1999). At the undergraduate level, between 51% (Agnew et al., 1993) and 61% (Slate, Jones, & Harlan, 1998) of suitable behaviors tend to be utilized by undergraduate students. Even at the graduate school level, only 41% of desirable study behaviors typically are utilized (Onwuegbuzie et al., 2001).

In the foreign language context, research has shown that the most successful learners are those who use learning strategies that tend to be the most optimal for second language acquisition (Ehrman & Oxford, 1990, 1995). Because learning

strategy use is a component of study habits, it is likely that the latter would be related to foreign language achievement. Indeed, as Oxford (1989) noted, "language learning strategy research has suffered from an overemphasis on metacognitive and cognitive strategies, which are admittedly very important, at the expense of other strategy types that are also very useful" (p. 2).

It should be noted that, although likely related, study habits are not the same as learning strategies, which have received much attention in the foreign language literature (e.g., MacIntyre 1994; MacIntyre & Noels 1996; Oxford & Crookhall 1989), nor learning styles (Bailey, Onwuegbuzie, & Daley, 2000b; Ehrman,1994; Ehrman & Oxford, 1995; Felder & Henriques, 1995) Specifically, learning strategies represent actions chosen by students that are intended to facilitate learning. Thus, learning strategies "1) focus on intentional actions and 2) require that the student chooses to perform the strategic action" (McIntyre 1994, p. 190). On the other hand, while some study habits may include attempts to improve learning (e.g., making outlines of a chapter), many habits represent either inactions (e.g., not recopying lecture notes) or ineffective techniques (e.g., drinking alcohol while studying).

Surprisingly, little is known about which study habits distinguish successful from unsuccessful language learners. This was the major purpose of the present investigation. It was hoped that findings from this inquiry would lead to the identification of study skills that place students at risk for underachievement in foreign language courses, which, in turn, would facilitate appropriate curricular changes and other academic interventions for these students.

Method

Participants

Participants were 219 college students from a variety of disciplinary backgrounds, enrolled in either Spanish (63.9%), French (25.6%), German (7.8%), or Japanese (2.7%) classes at a mid-southern university. These courses either were at the introductory (65.3%), intermediate (29.2%), or advanced (5.5%) level. Participation was voluntary, with students required to sign an informed consent document. A Kruskal-Wallis one-way analysis of variance revealed no statistically significant differences in foreign language achievement ($\chi^2 = 0.18$, $p > 0.05$) among students enrolled in the four language areas. Similarly, no statistically significant achievement differences ($\chi^2 = 0.16$, $p > 0.05$) were found with respect to level of course (i.e., introductory, intermediate and advanced). Therefore, the responses of all participants were combined.

The mean age of the sample members was 22.8 ($SD = 6.9$), with 66.8% being female. With respect to year of study, the participants consisted of freshmen (15.1%), sophomores (19.7%), juniors (31.7%), seniors (30.3%), and graduate students (3.2%). These students were enrolled in more than 30 degree programs from the Colleges of Education, Business Administration, Health and Applied Sciences, Fine Arts and Communication, Liberal Arts, and Natural Sciences and Mathematics. The sample members, on average, had taken 65.4 credit hours ($SD = 49.8$). The mean grade point average of the participants was 3.05 ($SD = 0.59$), with their overall course load ranging from 1 to 9 ($M = 5.1$, $SD = 1.2$). The majority of students (61.3%) were required to take the language course as part of their degree programs. Interestingly, 84.9% of the participants had studied a foreign language formally in high school, whereas 31.5% had

taken previously at least one foreign language course at the college level. A slight majority of students (54.8%) had never left the United States. Of those who had, the mean number of countries visited was 1.02 (*SD* = 1.62). Approximately one-fourth (25.7%) of the students had immediate family members whose native language was not English. Finally, on a 100-point scale, the expected average for the foreign language course reported by the students was 87.7% (*SD* = 7.3%).

Instruments and Procedure

Participants were administered the Study Habits Inventory (SHI) and the Background Demographic Form (BDF) on the fourth week of the semester, and were instructed to complete them at home and to return the completed forms by the sixth week. The SHI, developed by Jones and Slate (1992), consists of 63 true-false items designed to assess the typical study behaviors of college students. Thirty items describe effective study behaviors, whereas 33 items characterize ineffective study behaviors. The latter items are key-reversed such that total scale scores range from 0 to 63, with high scores indicating appropriate study skills. Jones and Slate (1992) reported scores on the SHI that yielded a mean alpha coefficient of .85, and a two-week test-retest coefficient of .82. Onwuegbuzie, Slate, Paterson, Watson, and Schwartz (2000) reported scores that yielded a reliability coefficient, as measured by coefficient alpha, of .85 (95% Confidence Interval [CI] = .81, .89). Similarly, Onwuegbuzie et al. (2001) noted reliability estimate of .85 (95% CI = .81, .89). Most recently, Onwuegbuzie and Collins (in press) reported a reliability index of .87 (95% CI = .85, .89). For the current study, coefficient alpha was .88 (95% CI = .86, .90). Evidence of validity of the SHI has been presented via significant correlations with college students' grades (Jones

& Slate, 1992; Lammers et al., in press).

The BDF, developed specifically for this study, extracted relevant demographic information such as age, gender, degree program, year of study, native language, and countries visited. Finally, foreign language achievement was measured using students' final course averages. This global measure was selected rather than isolated measures of specific skills in order to maximize the external validity (i.e., generalizability) of the findings. In fact, use of numerical averages based on the diverse achievement measures (homework, participation, compositions, oral and written tests) reflected in the course grades of this study, is consistent with Gardner and MacIntyre's (1993) recommendation to include "many different measures of second language achievement in studies concerned with affective correlates of achievement" (p. 182).

Results

The mean SHI score for students in this study was 34.92 (*SD* = 9.77; range = 11-58), indicating that they regularly performed only 55.4% (*SD* = 15.51%; range = 17.46%-92.06%) of appropriate behaviors that were assessed by the SHI. This mean is comparable to the means found in previous research of undergraduate college students of 32.0 (Agnew et al., 1993), 33.0 (Jones, 1989), 33.7 (Jones, Slate, Perez, et al., 1993), 34.2 (Jones, Slate, Marini, et al., 1993; Jones et al., 1994), 36.4 (Jones, Slate, & Kyle, 1992), and 33.6% (Lammers et al., in press). The 95% confidence interval pertaining to the percentage of suitable behaviors in the present study was 54.4% to 56.5%. This relatively narrow interval suggests that students were homogeneous with respect to their study habits.

As recommended by Jones, Slate, Blake, et al. (1992), study skill strengths were defined as those SHI items on which at least 75% of the students responded in an appropriate manner (i.e., responding "true" to items that described appropriate behaviors and "false" to items that characterized inappropriate behaviors). Conversely, study skill weaknesses were defined as those SHI items on which at most 25% of the students responded in an appropriate manner. This method resulted in the classification of 12 characteristic strengths and 6 characteristic weaknesses within the sample .

Study skills strengths. A content analysis of the identified strengths indicated that these strengths fell into the following three categories: note-taking, time management, and study techniques (Table 1). With respect to taking notes, students tended to report that they used notebooks rather than loose paper to take notes. Additionally, they tended to take notes as they read material, rather than waiting until they had completed their reading assignments to take notes. Finally, when taking notes in class, these students were more apt to use abbreviations and phrases.

Insert Table 1 about here

With respect to time management, students in the sample were likely to have papers completed on time. Finally, with regard to study techniques, students typically had the necessary materials to study; and when studying, they tended to avoid

consumption of alcoholic beverages. The participants also tried not to rely on rote memorization, preferring to relate course materials to everyday life and to material in other courses. These students also were more apt to break down the study material into meaningful components that could be studied separately. Further, the sample members reported avoiding accepting everything that they read, preferring to think critically about new material. Moreover, they tended not to have problems identifying the important aspects of what they read.

Study skills weaknesses. A content analysis of weaknesses revealed the following three general themes: (1) note-taking, (2) study techniques, and (3) reading skills. With respect to the former, students tended not to use designated notebooks to record new words and their meanings. Nor did most of the students recopy their lecture notes. Further, these students were unlikely to use a tape recorder as a replacement for, rather than as an adjunct to, taking notes. Pertaining to study techniques, students tended to undertake the bulk of their reviewing for a test the night prior to the examination. Finally, with regard to reading skills, students reported that they did not preview chapters of a book before reading them by creating outlines. Perhaps even more importantly, the majority of students reported that they often "read" several pages without knowing what was on them.

Insert Table 2 about here

Relationship Between Study Skills and Foreign Language Achievement

Because a relatively smaller proportion of undergraduate students attain an "A" grade in foreign language courses than in other programs (Onwuegbuzie et al., 2000), students whose course average was greater than or equal to 90% (i.e., those who attained an "A" grade) (n = 76, M = 93.30, SD = 2.48) were contrasted with students whose course average was less than 80% (i.e., those who attained a "C" grade or lower) (n = 72, M = 71.89, SD = 6.97). A canonical discriminant analysis was then undertaken comparing the upper and lower achievers, using the individual SHI items as the discriminating variables (Tabachnick & Fidell, 1996).

The selected discriminant model contained six SHI items, with a discriminant function that was statistically significant (F[6, 117], $p < .0001$), and which accounted for 83.3% of the between-groups variance (canonical R = .92). The group centroids were 2.25 for upper achievers and -2.18 for lower-achieving students, indicating that this function primarily discriminated these two groups of students. The six SHI items that contributed to the canonical function are presented in Table 3, along with their standardized canonical discriminant function coefficients and structure coefficients.

Insert Table 3 about here

From the standardized coefficients in Table 3, it can be seen that the lower achievers were more likely than were the upper achievers to report that (a) they frequently include a lot of irrelevant or unimportant information in their notes; (b) when they have difficulty with their assignments, they do not seek help from their instructor; (c) they put their lecture notes away after taking the test and never consult them again;

(d) they have to be in the mood before attempting to study; (e) they have a tendency to doodle or to daydream when they are trying to study; and (f) they do not look up in a dictionary the meanings of words that they do not understand.

According to Onwuegbuzie and Daniel (in press), variables with relatively small structure coefficients and relatively large standardized coefficients in absolute value magnitude indicate that they are *suppressor* variables in canonical discriminant models. Suppressor variables are variables that assist in the prediction of dependent variables due to their correlation with other independent variables (Onwuegbuzie & Daniel, in press). From Table 3, it can be seen that the following study habits appeared to serve as suppressor variables because their standardized coefficients were large, whereas their corresponding structure coefficients were relatively small: (a) "I tend to include a lot of irrelevant or unimportant information in my notes"; (b) "When I have difficulty with my work, I do not hesitate to ask help from my instructor"; and (c) "I look up in a dictionary the meanings of words that I do not understand."

Discussion

The purpose of the present investigation was to examine the study skills of college students enrolled in foreign language courses. Findings revealed that the students responded appropriately to 55.4% of the statements assessing study habits. Although this proportion is similar to that reported in the literature, it is clear that many of these students could benefit from study skills training. Interestingly, study skill weaknesses were identified in the areas of note-taking, study techniques, and reading skills--skills that are directly addressed in many training programs.

A canonical discriminant analysis revealed study habits that significantly

predicted high (i.e., students who attained an "A" grade) and low (i.e., students who attained a "C" grade or lower) levels of performance in foreign language courses. These study habits, which relate to motivation, note-taking, and study techniques, have both logical and intuitive appeal because they represent behaviors that can be changed. As such, findings from the present study have provided some direction for interventions that foreign language instructors could consider implementing and evaluating.

The relationships found between specific study skills and performance in foreign language courses is consistent with Bailey, Onwuegbuzie, and Daley (2000a), who found a relationship between overall study habits and foreign language anxiety. Additionally, these associations also are consistent with researchers who have noted that specific study habits predict performance in other subject areas at the high school (Jones, Slate, Bell, & Saddler, 1991; Jones, Slate, Blake, & Holifield, 1992; Slate, Jones, & Dawson, 1993), undergraduate (Agnew et al., 1993; Jones, Slate, & Kyle, 1992; Jones et al., 1994; Jones et al., 1993; Lammers et al., in press; Lawler-Prince et al., 1993; Slate, Jones, & Charlesworth, 1990), and graduate (Onwuegbuzie et al., 2001) levels. Moreover, the link between study habits and second language acquisition is congruent with researchers who have found that foreign language performance is, at least in part, a function of learning styles (Bailey, Onwuegbuzie, & Daley, 2000b; Ehrman,1994; Ehrman & Oxford, 1995; Felder & Henriques, 1995) and learning strategies (Ehrman & Oxford, 1990, 1995).

Recommendations: Study Habits and Foreign Language Achievement

Based on the present results and those in the area of learning styles and learning strategies, foreign language instructors should consider developing and

implementing study skills interventions within the context of second language acquisition. Encouragingly, study skills training has been found to be most effective when domain-specific skills are taught as part of the courses that students are currently taking (Langer & Neal, 1987). Additionally, appropriate study skills learned by students are more likely to be utilized if the study skills instruction is combined with effective motivational techniques (Brophy, 1987; Jones, Slate, & Kyle, 1992).

In addition to those study habits that were related to lower foreign language achievement and that will be discussed below, it is instructive to examine some of the characteristic weaknesses in students' study skills as outlined in Table 2 since foreign language teachers likely will desire to make special note of their implications. For example, it will come as no surprise that too many undergraduate foreign language students put off until the night before their studying for exams. This is a particularly poor study skill in the foreign language class, however, since little proficiency can be gained by cramming. Students can be encouraged to be more responsible for their studying and more reasonable in their time allotment if assignments are given and graded in a way that forces the students to keep up with a more regular and manageable coverage of new material.

Unfortunately the fact that only 7% of students report that they "jot down a few questions" before reading a chapter suggests that few students use the "skimming" and "scanning" techniques recommended by foreign language reading theorists (Barnett, 1989). Teachers will want to be aware that few students in their classes will be organizing their reading in this manner and should thus take care to include pre-reading exercises in assignments and classroom activities to reinforce this behavior. Perhaps

most significantly, only 15% of students in the current investigation reported that they utilized a system to record new words and their meanings. Given that vocabulary acquisition is a key to learning a foreign language (Pimsleur, 1980), this finding is particularly compelling. Indeed, this result suggests that students may benefit from being taught how to develop a system to record new words and meanings. One such method entails telling students to make a small dot next to a word in the dictionary every time they look it up and then to write a new word in a vocabulary notebook every time they notice that they have had to look up a word for the third time. Obviously, a word one has to look three times is likely one worth learning and remembering.

This finding also corresponds to the item in Table 3 which reflects that lower performing students tend not to look up words in the dictionary. Although some authors advise teachers to encourage learners to look up only those words that are absolutely necessary (Barnett, 1989), this finding seems to suggest many lower achieving students are already inclined to underutilize the dictionary. Because taking the time and trouble to look words up in the dictionary also reflects motivation and willingness to stay on task long enough to pause to look up the word or words needed, and then to return to the task at hand, it is easy to see how students who do not look up words in the dictionary also might be those who "wait for the mood to strike them to study" or who tend "to doodle or daydream" when trying to study. Given the fact that most students need instruction in how to use a dictionary effectively, it is important to assure that students are informed of the type of dictionary they need for the course they are taking and that they receive instruction in the subtleties of proper dictionary usage.

Perhaps the most challenging finding in Table 3 relates to the fact that lower

achieving students who need to seek more help in the language are precisely those who are less likely to seek help from the instructor. However, this finding is consistent with the often replicated finding of an inverse relationship between help-seeking and the need for assistance (Karabenick & Knapp, 1988). Teachers can respond to this fact in numerous ways, including developing the habit of writing on students' exams that they should see the instructor if they do not have the grade they desire. Students also should be made aware of alternative tutoring opportunities available either through the university's student services or perhaps through the foreign language program. It is essential that lower achieving students be strongly (i.e., repeatedly) encouraged to seek help so that they will take the first step in getting the additional tutoring they need.

Conclusions

The present findings have implications for both the teaching and learning of foreign languages at the secondary school and college levels, bearing in mind that the majority of students begin learning a foreign language formally during their secondary school education. Indeed, nearly 85% of the current sample had studied a foreign language formally in high school. Interestingly, poor study skills have been noted at the secondary level, with only between 40% and 48% of appropriate study behaviors being performed by high school students (Jones et al., 1991; Jones et al., 1992; Slate et al., 1993). Thus, by implementing study skills programs targeted at second language acquisition in secondary schools and even earlier, students may develop appropriate skills that may assist them in their foreign language courses throughout their college experience.

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Table 1: Characteristic Strengths in Students' Study Skills

Study Habits Item	Percent Responding Appropriately
Note-Taking	
When taking notes in class, I abbreviate words and jot down phrases rather than complete sentences.	77.6
I take notes on odd, loose slips of paper instead of in a notebook.	94.5
I take notes after I have completed a reading assignment rather than taking notes as I go along.	77.1
Time Management	
I often do not have reports ready on time, or they are done poorly if I am forced to have them in on time.	89.0
Study Techniques	
I often sit down to study only to find that I do not have the necessary books, notes, or other materials.	81.3
I often try to make school more enjoyable by having a beer while I study.	91.7
In studying a textbook, I try to memorize the exact words in the text.	80.4
I try to break large amounts of information into small clusters that can be studied separately.	80.4
I use the facts I learned in one course to help me understand the material in another course.	87.2
I use the facts learned in school to help me understand events outside of school.	87.2
I try to think critically about new material and not simply accept everything I read.	86.8
I have trouble in picking out the important points in the material I read.	75.3

Table 2: Characteristic Weaknesses in Students' Study Skills

Study Habits Item	Percent Responding Appropriately
Note-Taking	
As soon as possible after class, I recopy my lecture notes.	9.6
I tape record lectures instead of taking notes.	2.7
I keep a special indexed notebook or card system or recording new words and their meanings.	14.6
Study Techniques	
I do most of my reviewing for a test the night before the examination.	23.7
Reading Skills	
Before reading a chapter, I jot down a few questions and a list of key terms to focus my attention while reading.	6.8
Sometimes I discover that I have "read" several pages without knowing what was on them.	13.2

Table 3: Study Habits Inventory Items that Discriminated Successful and Less Successful Learners in Foreign Language Courses

Study Habits Item	Standardized Coefficient	Structure Coefficient
I tend to include a lot of irrelevant or unimportant information in my notes.	-.33*	-.21
When I have difficulty with my work, I do not hesitate to seek help from my instructor.	.37*	.21
I put my lecture notes away after an exam and never look at them again.	-.42*	-.40*
I have to wait for the mood to strike me before attempting to study.	-.69*	-.61*
I have a tendency to doodle or daydream when I am trying to study.	-.45*	-.40*
I look up in a dictionary the meanings of words that I do not understand.	.41*	.21

Note: Positive coefficients indicate that students who tend to exhibit this behavior also tend to have the highest levels of foreign language achievement; negative coefficients indicate that students who tend to exhibit this behavior also tend to have the lowest levels of performance.

*Loadings with effect sizes larger than .3 (Lambert & Durand, 1975)

Note: Items in italics represent suppressor variables, characterized by high standardized coefficients and low structure coefficients.